

REMARKS

Claims 1, 3-8, 10-15 and 17-22 are pending in the application. By this amendment, claim 4 is cancelled and claims 5, 7, and 8 are amended. Thus, claims 1, 3, 5-8, 10-15 and 17-22 remain pending in the application.

Claims 1, 3-8, 10-14, 17 and 18 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Carlston (U.S. Pat. No. 4,998,997) in view of Magowan (U.S. Pat. No. 136,079) in view of Platkiewicz (U.S. Pat. No. 4,465,799) and further in view of Curtis (U.S. Pat. No. 5,036,774) and Spencer et al. (U.S. Pat. No. 5,086,707).

The rejections are traversed as follows.

The Carlston reference teaches a side bearing unit for a railroad car including a housing 54, a round top cap 32, and a pair of elastomeric springs 36 and 38 accommodated therebetween. The springs are open-ended hollow tubes. (See col. 3, ll. 62-63). The springs are designed to fold and flex so that during a normal work cycle, the slope of the force vs. travel curve remains as flat as possible. (See col. 3, line 64 to col. 4, line 1). The elastomeric spring is designed so that throughout its total travel from free height, it is folding and flexing rather than compressing. (See col. 4, lines 15-19).

Additionally, the Carlston reference teaches the spring having a loading area that remains essentially the same throughout its total travel in a work cycle. This is accomplished by designing the spring so that the outside diameter minus the inside diameter is less than the height within the side bearing. (See col. 4, lines 17-22).

Magowan on the other hand, teaches a solid toroidal spring having a circular cross-section. The Magowan spring is designed to be compressed under load. (See col. 2, l. 16-18).

The present invention as recited in independent claim 1 is directed to a bearing pad assembly comprising at least one compression spring positioned within

a first housing bore wherein the compression spring comprises a solid resilient material having a toroidal shape, the toroid having an outside diameter minus an inside diameter equal to or greater than a height when positioned in the bearing pad assembly. The spring provides a force resisting compression generally at an increasing rate when progressively compressed, thereby providing a low initial impulse, but a high ultimate resistance to compression in urging first and second abutment surfaces away from each other in response to a load imposed on at least one of said abutment surfaces. (Specification, pg. 6, ll. 30-34, pg. 7, ll. 1., also see Fig. 3).

Clearly, the compression spring of claim 1 of the present invention is very different from the spring disclosed by the Carlston reference. In fact, Carlston teaches a spring nearly the opposite of the spring of the claimed invention. The Carlston spring is hollow, specifically designed to fold and flex rather than compress such that the force versus travel curve for the spring is as flat as possible. Whereas the compression spring in the claimed invention is designed to compress providing an increasing force versus travel curve. Additionally, Carlston requires the spring have an outside diameter minus the inside diameter less than its height whereas Applicant's claims 1 and 15 recite a spring having an outside diameter minus an inside diameter equal to or greater than a height when positioned in the bearing pad assembly. Although the Magowan reference teaches a solid torus shaped spring meeting this limitation, the Examiner has not identified a motivation or suggestion to combine the spring of Magowan with the side bearing unit of Carlston.

Prima facie obviousness cannot be established by combining the teaching of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination. Under 35 U.S.C. § 103, teachings of references can be combined only if there is some suggestion or incentive to do so. ACS Hosp. Sys.,

Inc. v. Montefiore Hosp., 221 USPQ 929, 932, 933 (Fed. Cir. 1984). In this case, the Examiner has not identified any such suggestion or incentive to combine the spring in Magowan with the Carlston side bearing unit. Therefore, the Examiner has failed to establish prima facie obviousness.

Not only is there no suggestion or motivation to combine the teachings of Carlston and Magowan sufficient to establish prima facie obviousness, the Carlston reference teaches away from the combination. A factor cutting against a finding of motivation to combine or modify the prior art is when the prior art teaches away from the claimed combination. A reference may be said to teach away when a person of ordinary skill, upon reading the reference, would be led in a path divergent from the path the applicant took. In re Gurley, 31 USPQ 2d at 1131. In this case, the Carlston reference clearly teaches away from the combination of including a solid toroid according to the teachings of Magowan in an assembly according to Carlston as stated by the Examiner. As mentioned above, the Carlston side bearing unit is designed using a hollow spring specifically designed to fold and flex under load and provide a flat force versus travel curve wherein the solid spring of Magowan is designed to compress providing increased resistance throughout its travel. Thus, the Carlston reference teaches away from using a solid spring such as that of Magowan. Therefore, the combination of the Carlston and Magowan references is improper to support and obviousness rejection.

Additionally, if the proposed modification would render the prior art unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. In re Gordon, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984). Clearly, the solid spring of Magowan would render the Carlston side bearing unit unsatisfactory for its intended purpose, thus, there is no suggestion or motivation to make the proposed modification and the combination of the Magowan

and Carlston references is improper to support an obviousness rejection.

Furthermore, the solid spring of Magowan would defeat the principle operation of the Carlston device. "If the proposed combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims prima facie obvious." In re Ratti, 270 F.2d 810, 123 USPQ 349 (CCPA 1959).

For at least the above-identified reasons, the Examiner's rejection of independent claim 1 based on combining the Carlston and Magowan references is improper and should be withdrawn.

The Platkiewicz reference is directed to a low friction slide lining composition; Curtis shows a long-travel side bearing for an articulated railroad car, and Spencer is directed to a self adjusting constant contact side bearing for railcars. Apparently these references, according to the Examiner, are cited for teaching motivation for providing a slip lining to the bearing pad assembly as recited in claim 1. However, there is no teaching or motivation in these references or the other cited references for providing a bearing pad assembly including at least one compression spring positioned within a first housing bore, wherein the compression spring comprises a solid resilient material having a toroidal shape for urging said first and second load bearing members away from one another in response to a load being imposed upon at least one of said first and second abutment surfaces, as recited in Applicant's claim 1.

In summary, the teaching of Carlston, Magowan, Platkiewicz, Curtis and Spencer taken either alone or in combination is insufficient to render claim 1 obvious.

Claims 3-8, 10-14, 17 and 18 each ultimately depend from and thereby further limit claim 1, these dependent claims are likewise deemed unobvious for at least the

reasons set forth above directed to claim 1.

Claims 15, 19 and 20 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Carlston (U.S. Pat. No. 4,998,997) in view of Magowan (U.S. Pat. No. 136,079). The rejection is traversed as follows.

The same reasoning applied above with respect to the Carlston and Magowan references with respect to the rejection of claim 1 apply equally here. For the above-mentioned reasons the teaching of Carlston and Magowan taken either alone or in combination is insufficient to render amended independent claim 15 obvious. Because claims 19 and 20 each ultimately depend from and thereby incorporate the limitations of claim 15, these dependent claims are likewise deemed unobvious for at least the reasons for claim 15.

Claims 21 and 22 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Carlston (U.S. Pat. No. 4,998,997) in view of Platkiewicz (U.S. Pat. No. 4,465,799) and further in view of Curtis (U.S. Pat. No. 5,036,774) and Spencer et al. (U.S. Pat. No. 5,086,707). The rejection is traversed as follows.

Claims 21 and 22 each depend either directly or indirectly from independent claim 15, thus, these dependent claims are deemed unobvious for at least the reasons set forth above for independent claim 15.

CONCLUSION

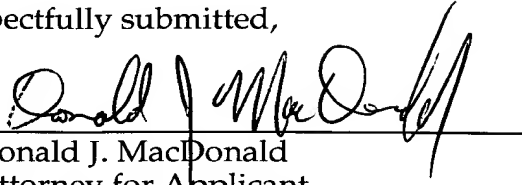
In view of the foregoing, it is believed that all pending claims, namely, claims 1, 3, 5-8, 10-15 and 17-22 of this application are in condition for allowance and such action is earnestly solicited.

Enclosed please find a check in the amount of \$110 to cover a one month extension to file this Response. Applicant believes that no additional fee is due in

connection with this filing. Please charge any deficiency in fee due or any other fee required for this application to Deposit Account No. 13-0235.

Respectfully submitted,

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Marked-up Version of Amendments

A marked-up version of the amendments is set forth below showing additions with underlining and deletions between brackets.

In the Claims:

Claim 4

Claim 4 is canceled.

Claim 5

Claim 5 is amended as follows:

5. The assembly of claim 1[4] wherein said solid resilient material is substantially an organic polymer.

Claim 7

Claim 7 is amended as follows:

7. The assembly of claim 1[4] wherein the solid resilient material is in the form of a toroidal ring having a circular cross-section.

Claim 8

Claim 8 is amended as follows:

8. The assembly of claim 1[4] wherein the compression spring includes:
at least two springs; and
a plate positioned between the springs, separating the springs from one another.